

In the Matter of	)	
	)	
Carrier Current Systems, including Broadband over	)	ET Docket No. 03-104
Power Line Systems	)	
	)	
Amendment of Part 15 regarding new requirements and	)	
measurement guidelines for Access Broadband over	)	ET Docket No. 04-37
Power Line Systems	)	

### COMMENTS

In the above-entitled proceeding, the Commission has attempted to ally concerns voiced by several parties in relation to interference caused by BPL transmissions. The system envisioned by the FCC relies heavily on “adaptive interference mitigation” techniques and reporting to either remove certain frequency bands from BPL utilization or temporarily shift those frequencies, thus enabling the resolution of harmful interference cases.

I do not believe this approach is coherent with respect to Part 15 regulatory structure, nor is it practical in a real world application for many primary users of BPL utilized frequencies.

Part 15 rules state:

“Operation of an intentional, unintentional, or incidental radiator is subject to the conditions that no harmful interference is caused and that interference must be accepted that may be caused by the operation of an authorized radio station”

Further :

“The operator of a radio frequency device shall be required to cease operating the device upon notification by a Commission representative that the device is causing harmful interference. Operation shall not resume until the condition causing the harmful interference has been corrected.”

In the above-entitled NPRM, the Commission has proposed that:

- (f) Access BPL systems shall incorporate adaptive interference mitigation techniques such as dynamic or remote reduction in power and adjustment in operating frequencies, in order for Access BPL installations to avoid site-specific, localized use of the same spectrum by licensed services. Access BPL systems shall incorporate a shut-down feature to deactivate units found to cause harmful interference.

Further:

- (g) Entities operating Access Broadband over Power Line systems shall supply to a Federal Communications Commission/National Telecommunications and Information Administration recognized industry-operated entity, information on all existing, changes to existing and proposed Access BPL systems for inclusion in a data base. Such information shall include the installation locations, frequency bands of operation, and type of modulation used. No notification to the FCC is required.

In practical usage, the proposed rules would not be strong nor detailed enough to prevent continued interference by BPL systems. For example: I am a licensed amateur radio operator. A large portion of my amateur radio related activity is spent listening to (or listening for) transmissions by other operators--in other words, a passive activity. Suppose I receive harmful interference from a BPL transmission. I would then contact the BPL provider, who would (supposedly) temporarily adjust the operating characteristics of the system to remedy the situation. After some time, I might change frequency bands and require further

interference remediation on my new frequency band, necessitating another request to the BPL provider. After a certain time has elapsed, the BPL provider may decide to begin reusing the frequency range I was using initially. This could go on ad infinitum. *The end effect would be in real world application licensed primary users of the spectrum would be subservient to a Part 15 service. We would, in effect, have to ask a Part 15 service for permission to use spectrum on which we are licensed primary users.* In addition, this would effectively change Part 15 from a “shall not interfere” service to one of “interference is acceptable, as long as the interference can be remedied immediately”. I would argue this is not protecting licensed users from interference; rather, it is permitting interference until a complaint is received—a substantial weakening of the Part 15 rules.

Further, under the proposed rules not only would the Commission not be notified that harmful interference was occurring, but also no remedy would be available due to the loose wording of the proposal. This proposal lacks any regulatory “trip wire” whereby a situation goes from being resolved by the parties to one requiring FCC intervention. This is a serious oversight on the part of the Commission and amounts to the FCC relinquishing itself of its’ regulatory role.

These deficiencies are easily corrected however, by modifying paragraphs (f) and (g). I propose the following (italics indicate changes/additions to the proposal):

- (f) Access BPL systems shall incorporate adaptive interference mitigation techniques such as dynamic or remote reduction in power and adjustment in operating frequencies, in order for Access BPL installations to avoid site-specific, localized use of the same spectrum by licensed services. Access BPL systems shall incorporate a shut-down feature to *permanently* deactivate units found to cause *repeated cases* of harmful interference. *In particular, Access BPL installations shall be required permanently block certain frequencies or bands of frequencies from being utilized which cause repeated interference to licensed users.*

Further:

- (g) Entities operating Access Broadband over Power Line systems shall supply to a Federal Communications Commission/National Telecommunications and Information Administration recognized industry-operated entity, information on all existing, changes to existing and proposed Access BPL systems for inclusion in a data base. Such information shall include the installation locations, frequency bands of operation, and type of modulation used. No notification to the FCC is required *unless repeated requests for adaptive interference mitigation are received by licensed spectrum users. If this occurs, the Access BPL provider shall notify the FCC pursuant to this paragraph and immediately modify the operational characteristics of the system pursuant to paragraph (f). For the purposes of paragraphs (f) and (g) “repeated” shall mean two occurrences of harmful interference in any rolling 3 month time period. If permanent modification to the system is not made pursuant to paragraph (f) after the second adaptive interference mitigation request, the Access BPL provider shall be liable for monetary forfeiture as assessed in 47 C.F.R. § 1.80(b)(3).*

I think that the Commission has presented spectrum users a good foundation on which to build. It is now up to all of us to come together and iron out our differences so that everyone can peacefully coexist.

I thank the Commission for its’ time.

Sincerely,

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